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AUG 11 2006

Amendments to the Claims

Please amend claims 19, 35, 37 – 39, and 46, as indicated herein. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. – 7. (Cancelled)

8. (Previously presented) An apparatus for use in a wafer process comprising:

a magneto resistive element; and

a mask including a first shutter, a second shutter, and an actuator for moving the first shutter and second shutter,

a controller, wherein said controller is structured to monitor at least an electrical resistance of the magneto resistive element during ion milling of the magneto resistive element, further wherein the controller is structured to independently actuate each of the first and second shutter based on the electrical resistance of the magneto resistive element.

9. (Original) The apparatus of claim 8 wherein the mask is a dynamic mask.

10. (Previously presented) The apparatus of claim 9 wherein the controller actuates each of first shutter and second shutter between an open position where the first and second shutter is not covering a portion of the magneto resistive element and a covering position, where the first and second shutter is covering a portion of the magneto resistive element.

11. (Cancelled)

12. (Previously presented) The apparatus of claim 9 wherein the magneto resistive element is a row of a plurality of magneto resistive elements sliced from a wafer.

13. (Previously presented) The apparatus of claim 12 wherein the controller actuates each of the first shutter and the second shutter between an open position where the at least one of the first and second shutter is not covering a portion of the magneto resistive element, and a covering position where the at least one of the first and second shutter is covering a portion of the magneto resistive element, in response to the electrical resistance associated with that portion of the magneto resistive element being at a predefined value.

14. (Original) The apparatus of claim 13 wherein the first shutter has a width larger than the width of at least one magneto resistive element.

15. (Original) The apparatus of claim 13 wherein the first shutter has a width larger than the width of one magneto resistive element and less than the width of two magneto resistive elements.

16. (Original) The apparatus of claim 13 wherein the first shutter has a width larger than the width of at least two magneto resistive elements.

17. (Original) The apparatus of claim 13 wherein the electrical resistance is measured during the wafer process of ion milling.

18. (Previously presented) The apparatus of claim 17 wherein the first and second shutter have a width to substantially protect the magneto resistive element below the first and second shutter from removal of material when the shutter is placed in a covering position over the magneto resistive element.

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19. (Currently amended) The apparatus of claim 8-13, wherein ~~the~~ a magneto resistive element selected from the plurality of magneto resistive elements includes a stripe having a stripe height, further wherein the electrical resistance monitored property level measured is related to the stripe height.

20. (Previously presented) An apparatus for use during a semiconductor fabrication process comprising:

a plurality of magneto resistive elements having a plurality of stripes;

a mask having a plurality of shutters positioned adjacent the plurality of magneto resistive elements; and

controller means for monitoring an electrical property level associated with the plurality of stripes, and independently actuating each of the plurality of shutters based on each of the plurality of stripes electrical property level during the fabrication of each of the plurality of stripes.

21. - 29 (Cancelled)

30. (Previously presented) An apparatus for use in a wafer process comprising:

a carrier;

an elongated element including a plurality of magneto resistive elements held by the carrier;

a mask including at least one shutter and an actuator for moving the at least one shutter, wherein said mask is used to selectively cover a first portion of the elongated element as an ion mill wafer process continues to act on a second portion of the elongated element, the ion mill wafer process substantially halting with respect to the first portion of the elongated element; and

a controller, wherein said controller is structured to monitor an electrical property level of the elongated element, further wherein the controller is structured to independently actuate the at least one shutter based on the monitored electrical property level.

31. (Previously Presented) The apparatus of claim 30 wherein the mask is a dynamic mask.

32. (Previously Presented) The apparatus of claim 31 further comprising a controller for the actuator, the controller actuating the at least one shutter between an open position where the at least one shutter is not covering a portion of the elongated element and a covering position where the at least one shutter is covering a portion of the elongated element.

33. – 34. (Cancelled)

35. (Currently Amended) The apparatus of claim 31 wherein the controller actuates the at least one shutter between an open position, where the at least one shutter is not covering a portion of the elongated element, and a covering position where the at least one shutter is covering a portion of the elongated element.

36. (Cancelled)

37. (Currently Amended) The apparatus of claim 31, wherein the at least one shutter has a width to substantially protect the plurality of elongated elements below the at least one shutter from removal of material where the shutter is placed in a covering position of the plurality of magneto resistive elements.

38. (Currently Amended) The apparatus of claim 30, wherein at least one magneto resistive element selected from the plurality of magneto resistive elements includes a stripe having a stripe height, the electrical property level monitored measured across the at least one magneto resistive element is related to the stripe height.

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39. (Currently Amended) An apparatus for use in a wafer process comprising:
a carrier;
an elongated element held by the carrier, wherein the elongated element includes a plurality of magneto resistive elements;
a mask including at least one shutter and an actuator for moving the at least one shutter, wherein said mask is used to selectively cover a first portion of the elongated element as an the ion mill wafer process continues to act on a second portion of the elongated element, the ion mill wafer process substantially halting with respect to the first portion of the elongated element; and
a controller for the actuator, the controller actuating the at least one shutter between an open position where the at least one shutter is not covering a portion of the elongated element, and a covering position where the at least one shutter is covering the portion of the elongated element, in response to a monitored electrical resistance associated with at least one of the plurality of magneto resistive elements.

40. (Previously Presented) The apparatus of claim 39 wherein the mask is a dynamic mask.

41 – 44. (Cancelled)

45. (Previously presented) The apparatus of claim 39, wherein the controller moves the at least one shutter over a portion of the elongated element, wherein the at least one shutter has a width to substantially protect the elongated element below the at least one shutter from removal of material where the shutter is placed in a covering position of the portion of the elongated element.

46. (Currently Amended) The apparatus of claim 39, wherein said elongated element includes a stripe having a stripe height, further wherein the electrical resistance monitored measured across the elongated element is related to the stripe height.